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Practitioner's Docket No. 52183

DEC 13 2007 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Barr et al.

Application No.: 10/773,989

Group Art Unit: 1752

Filed: February 6, 2004

Examiner: Connie P. Johnson

For: IMAGING METHODS

Mail Stop Appeal Brief-Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450


Sir:

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the documents listed below were submitted via facsimile to (571) 273-8300 to the United States Patent and Trademark Office to the attention of the Commissioner for Patents, **Mail Stop Appeal Brief-Patents**.

- (1) Transmittal of Appeal Brief;
- (2) Appeal Brief.

Dated: December 13, 2007


Deanna M. Rivernider, Assistant to:
John J. Piskorski (Reg. No. 35,647)
Rohm and Haas Electronic Materials LLC
Patent Department
455 Forest Street
Marlborough, MA 01752
(508) 229-7662

TOTAL NUMBER OF PAGES: 26

Should there be any problem with the transmission of the following document, please contact my Assistant, Deanna Rivernider, at (508) 229-7364.

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450TRANSMITTAL OF APPEAL BRIEF
(PATENT APPLICATION--37 C.F.R. SECTION 1.192)

1. Transmitted herewith is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on October 17, 2007.

2. STATUS OF APPLICANT

This application is on behalf of

- ☒ other than a small entity.
☐ a small entity.

A statement:

- ☐ is attached.
☐ was already filed.

CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. 1.8(a))

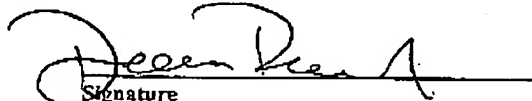
I hereby certify that, on the date shown below, this correspondence is being:

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- ☐ deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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- ☒ transmitted by facsimile to the Patent and Trademark Office.

Date: 12/13/2007
SignatureDeanna M. Rivernider
(type or print name of person certifying)

(Transmittal of Appeal Brief--page 1 of 3)

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3. FEE FOR FILING APPEAL BRIEF

Pursuant to 37 C.F.R. Section 1.17(c), the fee for filing the Appeal Brief is:

☐ small entity \$255.00☒ other than a small entity \$510.00Appeal Brief fee due \$ 510.00

4. EXTENSION OF TERM

NOTE: The time periods set forth in 37 C.F.R. 1.192(a) are subject to the provision of Section 1.136 for patent applications. 37 C.F.R. 1.191(d). See also Notice of November 5, 1985 (1060 O.G. 27).

NOTE: As the two-month period set in Section 1.192(a) for filing an appeal brief is not subject to the six-month maximum period specified in 35 U.S.C. 133, the period for filing an appeal brief may be extended up to seven months. 62 Fed. Reg. 53,131, at 53,156; 1203 O.G. 63 at 84. Oct. 10, 1997.

The proceedings herein are for a patent application and the provisions of 37 C.F.R. Section 1.136 apply.

(complete (a) or (b), as applicable)

- (a) ☐ Applicant petitions for an extension of time under 37 C.F.R. Section 1.136 (fees: 37 C.F.R. Section 1.17(a)(1)-(5)) for the total number of months checked below:

	Extension (months)	Fee for other than small entity	Fee for small entity
<input type="checkbox"/>	one month	\$ 120.00	\$ 60.00
<input type="checkbox"/>	two months	\$ 450.00	\$225.00
<input type="checkbox"/>	three months	\$1,020.00	\$510.00
<input type="checkbox"/>	four months	\$1,590.00	\$795.00

Fee: \$ _____

If an additional extension of time is required, please consider this a petition therefor.

(check and complete the next item, if applicable)

- ☐ An extension for _____ months has already been secured, and the fee paid therefor of \$ _____ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$ _____

(Transmittal of Appeal Brief--page 2 of 3)

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OR

(b) ☒ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

5. TOTAL FEE DUE

The total fee due is:

Appeal brief fee \$ 510.00Extension fee (if any) \$ TOTAL FEE DUE \$ 510.00

6. FEE PAYMENT

☐ Attached is a check in the sum of \$.☒ Charge Account No. 18-1850 the sum of \$ 510.00.

A duplicate of this transmittal is attached.

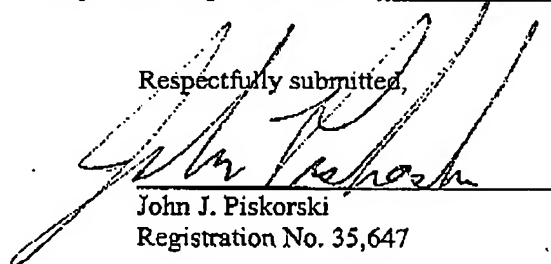
7. FEE DEFICIENCY

☒ If any additional extension and/or fee is required, this is a request therefor and to charge Account No. 18-1850.

AND/OR

☒ If any additional fee for claims is required, charge Account No. 18-1850.

Respectfully submitted,


John J. Piskorski
Registration No. 35,647

Rohm and Haas Electronic Materials LLC
455 Forest Street
Marlborough, Massachusetts 01752
Telephone No.: (508) 229-7662
Facsimile No.: (508) 787-4730

(Transmittal of Appeal Brief--page 3 of 3)

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PATENT
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52183

In re application of:
Barr et al.

Serial No.: 10/773,989

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For: IMAGING METHODS

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: Group Art Unit: 1752

: Examiner: Connie P. Johnson

Commissioner for Patents
P.O. BOX 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

Applicants respectfully appeal the decision of the Examiner, mailed July 18, 2007, finally rejecting claims 1-2, 4-8, 10-14 and 16-20.

The requisite fee for filing this brief is enclosed herewith.

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I. REAL PARTY IN INTEREST

The real party in interest in this appeal is the assignee of the application Rohm and Haas Electronic Materials LLC.

II. RELATED APPEALS AND INTERFERENCES

Related patent application serial number 11/378,933, which is assigned to Rohm and Haas Electronic Materials LLC, is also on appeal.

III. STATUS OF THE CLAIMS

Claims 1-20 have been presented in this application.

Claims 3, 9 and 15 were canceled.

Claims 1-2, 4-8, 10-14, and 16-20 stand rejected.

Claims 1-2, 4-8, 10-14, and 16-20 are presently on appeal (see the attached Claim Appendix).

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IV. STATUS OF AMENDMENTS (AFTER FINAL REJECTION)

No amendment was filed in response to the Final Rejection mailed July 18, 2007.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The invention is a method comprising: a) applying an imaging composition comprising one or more cyclopentanone based conjugated photosensitizers and one or more reducing agents chosen from quinone compounds and acyl esters of triethanolamine to a work piece; and b) projecting a 3-D image with a laser onto the imaging composition at 5mW or less to affect a color or shade change in the imaging composition to form an image on the imaging composition. See claim 1, specification, page 3, lines 27-31, page 5, lines 3-4, page 6, lines 13-16 and lines 22-25, page 23, lines 23-25, page 24, lines 13-18, and page 26, lines 8-22.

The invention also is a method comprising: a) providing an imaging composition comprising one or more cyclopentanone based conjugated photosensitizers and one or more reducing agents chosen from quinone compounds and acyl esters of triethanolamines, the imaging composition is applied to a film substrate with an adhesive applied to an opposite side of the film substrate; b) applying the imaging composition on the film substrate to a work piece; c) providing a 3-D imaging system for projecting a 3-D image with a laser onto the imaging composition; d) measuring a distance between a projector of the 3-D imaging system and at least one reference sensor on the work piece; e) applying algorithms to position the 3-D image onto the imaging compositions; and f) applying the 3-D image onto the imaging composition to form an image on the imaging composition. See claim 5, specification, page 3, lines 27-31, page 5, lines 3-4, page 6, lines 13-16 and lines 22-25, page 7, lines 6-8, page 9, lines 23-24, page 15, lines 13-15, page 23, lines 23-25, page 24, lines 13-18, and page 26, lines 8-22.

The invention further includes a method comprising a) providing an imaging composition comprising one or more photosensitizers, the imaging composition is applied to a film substrate with an adhesive applied to an opposite side of the film substrate; b) applying the imaging composition on the film substrate to a work piece; and c) projecting a 3-D image with a laser onto the imaging composition at 5mW and wavelengths of above 300 nm to less than 600 nm to affect a color or shade change in the imaging composition to form an image on the imaging composition. See claim 11, specification, page 4, lines 3-6 and lines 12-17, page 5, lines 3-4, page 6, lines 29-31, page 23, lines 23-25, page 24, lines 7-8 and lines 11-12, and page 32, lines 15-17.

VI. GROUND S OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1, 2 and 4 would have been obvious under 35 U.S.C. §103(a) over U.S. 5,681,676 to Telfer et al. in view of U.S. 5,112,721 to Kuchta and further in view of U.S. 2002/0064728 to Weed et al.
2. Whether claims 11, 12 and 16-18 would have been obvious under 35 U.S.C. §103(a) over U.S. 5,681,676 to Telfer et al. in view of U.S. 5,563,023 to Kangas et al. and in view of Applicants' admission.
3. Whether claims 11, 13 and 14 would have been obvious under 35 U.S.C. §103(a) over U.S. 5,681,676 to Telfer et al. in view of U.S. 5,563,023 to Kangas et al. as applied to claims 11 and 12, and further in view of U.S. 2002/0064728 to Weed et al. and Applicants' own admission.
4. Whether claim 5-8, 10, 19 and 20 would have been obvious under 35 U.S.C. §103(a) over U.S. 6,547,397 to Kaufman et al. in view of U.S. 6,618,174 to Parker et al. in view of U.S. 5,681,676 to Telfer et al., in view of U.S. 5,112,721 to Kuchta and further in view of U.S. 2002/0064728 to Weed et al.

VII. ARGUMENTS

ISSUE 1: Whether claims 1, 2 and 4 would have been obvious under 35 U.S.C. §103(a) over U.S. 5,681,676 to Telfer et al. in view of U.S. 5,112,721 to Kuchta and further in view of U.S. 2002/0064728 to Weed et al.

The applied document or combination of documents must teach or suggest all the limitations of the claims. See *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970) ("All words in a claim must be considered in judging the patentability of that claim against the prior art"). Telfer et al. do not teach or suggest alone, or in combination with Kuchta and Weed et al. a method comprising: a) applying an imaging composition comprising one or more cyclopentanone based conjugated photosensitizers and one or more reducing agents chosen from quinone compounds and acyl esters of triethanolamines to a work piece; and b) projecting a 3-D image with a laser onto the imaging composition at 5mW or less to affect a color or shade change in the imaging composition to form an image on the imaging composition as recited in claim 1.

The Final Rejection's allegation at page 2 that Telfer et al. teach a method of projecting a 3-D image onto an imaging composition to affect a color change in the imaging composition is error. The Final Rejection at page 8 cites column 7, lines 65-67, column 8 and column 12, lines 39-49 for support. Although Telfer et al. disclose a three-dimensional imaging method (Col. 7, lines 66-67), they do not at least teach or suggest projecting a 3-D image with a laser onto an imaging composition at 5mW or less to affect a color or shade change in the imaging composition to form an image on the imaging composition. There is no such disclosure in column 7, lines 65-67, column 8 and column 12, lines 39-49.

Telfer et al. teach generating a 3-D image of an object (Col. 3, lines 17-44), but do not teach or suggest projecting the 3-D image with a laser onto an imaging composition to affect a color or shade change in the composition. Telfer et al. state that an observer will see a three-dimensional orthoscopic image through the lenticular screen (Col. 3, lines 42-44), which is part of the imaging medium (Col. 3, lines 61-62), and behind the imaging medium (Col. 4, lines 44-67), which includes a color-forming composition adapted to undergo color change upon an increase in temperature (Col. 3, lines 63-67). The expressions "through the lenticular screen"

and "behind the imaging medium" does not mean on the imaging medium. The orthoscopic three-dimensional image is not being projected onto the imaging medium. The Final Rejection's allegation at page 9 that "That the 3-D image may be formed behind the composition instead of on top of the composition is not relevant because the 3-D image is still on the imaging composition." is error. The applied document must teach or suggest each and every element of the claim and Telfer et al. do not at least teach or suggest projecting a 3-D image with a laser onto the imaging composition as recited in claim 1.

Telfer et al. specifically teach forming a plurality of two-dimensional images of an object on imaging medium to form an orthoscopic three-dimensional image of an object which is visible to an observer through a lenticular screen (Col. 5, lines 20-36). The steps of the method of the Telfer et al. invention described in Figures 3 and 4 disclose that the image strips, which are formed with two-dimensional images (Col. 5, lines 24-36), are used to form the three-dimensional object as seen by the observer (Col. 22, lines 5-11). Figure 1 shows a laser source 22 generating infrared laser light ($h\nu_1$, $h\nu_2$ and $h\nu_3$) at a radiation sensitive layer 18; however, there is no disclosure that this infrared laser light is three-dimensional (Col. 14, lines 22-56). Accordingly, Telfer et al. do not teach or suggest all of the elements of claim 1. The Final Rejection is improperly combining Telfer et al. with Applicants' disclosure to arrive at the conclusion that it would have been obvious to project a 3-D image with a laser onto an imaging composition to affect a color or shade change in the imaging composition. See *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Telfer et al. teach using imaging media which is sensitive to infrared light (Col. 10, lines 51-55, col. 11, lines 32-38 and Col. 12, lines 25-28), not media which is sensitive to light at 5 mW or less. Media which is sensitive to light at 5 mW or less is below the infrared range (page 34, lines 7-11 and page 24, lines 11-13) of 700 nm. Further, Telfer et al. teach to include infrared absorbers in the imaging media when preferred color-forming compounds do not strongly absorb in the infrared region (col. 11, lines 1-8). Telfer et al. teach away from color-forming compositions which are sensitive to visible light. They specifically teach that infrared sensitive imaging media allows for such imaging media to be handled freely under normal room lighting and at the same time facilitates registration of the image using their method with the lenticular screen (Col. 11, line 66 to col. 12, line 6).

Kuchta and Weed et al. do not make up for the deficiencies of Telfer et al. Kuchta are directed to photopolymerizable compositions which absorb light in the visible region of the spectrum (Col. 1, lines 9-10), not the infrared. Kuchta discloses sensitizers which are sensitive to wavelengths of 443 nm (Col. 4, lines 57-59), 442 nm, 452 nm (Col. 5, lines 17-20), 481 nm, 477 nm (col. 6, lines 35-37), 255-275 nm, 300-375 nm, 430 nm and 255-375 nm (Col. 7, lines 27-35), not 700 nm and above as disclosed in Telfer et al. (Col. 10, lines 52-55 and Col. 11, lines 33-41). Even if such visible light sensitive compounds would have been added to the imaging media of Telfer et al., infrared absorbers would also have been added to make the imaging media sensitive to infrared radiation (Col. 11, lines 1-6), not visible radiation. Telfer et al. desire color-forming compositions which are insensitive to visible light (Col. 11, line 66 to Col. 12, line 6).

Weed et al. do not make up for the deficiencies of Kuchta. Weed et al. disclose that the combination of 9,10-phenanthrenequinone and an acyl ester of triethanolamine forms a photodeactivation compound (page 6, paragraph 0090, line 1). There would have been no reason or motivation, based on the disclosure of Telfer et al., to include a photodeactivation compound in the Telfer et al. imaging media when Telfer et al. desire to form a radiation sensitive imaging media.

Accordingly, for the reasons discussed above, claims 1, 2 and 4 are patentable over the applied documents.

ISSUE 2: Whether claims 11, 12 and 16-18 would have been obvious under 35 U.S.C. §103(a) over U.S. 5,681,676 to Telfer et al. in view of U.S. 5,563,023 to Kangas et al. and in view of Applicants' admission.

a) Claims 11 and 16-18

The applied document or combination of documents must teach or suggest all the limitations of the claims. See *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970) ("All words in a claim must be considered in judging the patentability of that claim against the prior art"). Telfer et al. alone, or in combination with Kangas et al. and Applicants' admission, do not at least teach or suggest a method comprising: a) providing an imaging composition comprising one or more photosensitizers, the imaging composition is applied to a film substrate with an adhesive applied to an opposite side of the film substrate; b)

applying the imaging composition on the film substrate to a work piece; and c) projecting a 3-D image with a laser onto the imaging composition at 5mW and at wavelengths of above 300 nm to less than 600 nm to affect a color or shade change in the imaging composition to form an image on the imaging composition as recited in claim 11.

Telfer et al. teach generating a 3-D image of an object (Col. 3, lines 17-44), but do not teach or suggest projecting the 3-D image with a laser onto an imaging composition to affect a color or shade change in the composition. Telfer et al. state that an observer will see a three-dimensional orthoscopic image through the lenticular screen (Col. 3, lines 42-44), which is part of the imaging medium (Col. 3, lines 61-62), and behind the imaging medium (Col. 4, lines 44-67), which includes a color-forming composition adapted to undergo color change upon an increase in temperature (Col. 3, lines 63-67). However, contrary to the Final Rejection's allegation at pages 4 and 10, Telfer et al. do not teach applying a 3-D image to any type of imaging composition.

Telfer et al. specifically teach forming a plurality of two-dimensional images of an object on imaging medium to form an orthoscopic three-dimensional image of an object which is visible to an observer through a lenticular screen (Col. 5, lines 20-36). The steps of the method of the Telfer et al. invention described in Figures 3 and 4 disclose that the image strips, which are formed with two-dimensional images (Col. 5, lines 24-36), are used to form the three-dimensional object as seen by the observer (Col. 22, lines 5-11). Figure 1 shows a laser source 22 generating infrared laser light ($h\nu_1$, $h\nu_2$ and $h\nu_3$) at a radiation sensitive layer 18; however, there is no disclosure that this infrared laser light is three-dimensional (Col. 14, lines 22-56). Accordingly, Telfer et al. do not teach or suggest all of the elements of claim 1. The Final Rejection is improperly combining Telfer et al. with Applicants' disclosure to arrive at the conclusion that it would have been obvious to project a 3-D image with a laser onto an imaging composition to affect a color or shade change in the imaging composition. See *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Further, Telfer et al. also teach away from compositions which are sensitive to visible light (Col. 11, line 66 to col. 12, line 6). Telfer et al. disclose formulations which are sensitive in the infra-red spectrum such as 700 to 1200 nm and preferably from 800 to 1200 nm, not above 300 nm to less than 600 nm as recited in present claim 11.

Kangas et al. and Applicants' Admission do not make up for the deficiencies of Telfer et al. Neither document at least teaches or suggests projecting a 3-D image with a laser onto an imaging composition as recited in claim 11. Each document is silent on such a method.

Accordingly, for the above reasons claims 11 and 16-18 are patentable over the applied documents.

b) Claim 12

The applied document or combination of documents must teach or suggest all the limitations of the claims. See *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970) ("All words in a claim must be considered in judging the patentability of that claim against the prior art"). Claim 12 recites the method of claim 11, wherein the adhesive is a releasable adhesive. Telfer et al. do not teach or suggest any releasable adhesive. Kangas et al. do not make up for the deficiencies of Telfer et al.

Although Kangas et al. disclose a pressure sensitive adhesive on a substrate side opposite to a side of the substrate which includes a photosensitive layer (Col. 2, lines 7-11 and Col. 8, lines 41), they do not teach or suggest a releasable adhesive. Kangas et al. only disclose a release liner for protecting the adhesive prior to use (Col. 8, lines 58-63 and claim 9). The releasable adhesive recited in claim 12 enables removal of the imaging composition after use on the substrate. Again, the Final Rejection is improperly combining Applicants' disclosure with the applied documents. See *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Accordingly, for the reasons discussed above claim 12 is patentable over the applied documents.

ISSUE 3: Whether claims 11, 13 and 14 would have been obvious under 35 U.S.C. §103(a) over U.S. 5,681,676 to Telfer et al. in view of U.S. 5,563,023 to Kangas et al. and further in view of U.S. 2002/0064728 to Weed et al. and Applicants' own admission.

The applied document or combination of documents must teach or suggest all the limitations of the claims. See *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970) ("All words in a claim must be considered in judging the patentability of that claim against the prior art"). Telfer et al. alone, or in combination with Kangas et al., Weed et al.

and Applicants' admission, do not at least teach or suggest a method comprising: a) providing an imaging composition comprising one or more photosensitizers, the imaging composition is applied to a film substrate with an adhesive applied to an opposite side of the film substrate; b) applying the imaging composition on the film substrate to a work piece; and c) projecting a 3-D image with a laser onto the imaging composition at 5mW and at wavelengths of above 300 nm to less than 600 nm to affect a color or shade change in the imaging composition to form an image on the imaging composition as recite in claim 11.

Telfer et al. teach generating a 3-D image of an object (Col. 3, lines 17-44), but do not teach or suggest projecting the 3-D image with a laser onto an imaging composition to affect a color or shade change in the composition. Telfer et al. state that an observer will see a three-dimensional orthoscopic image through the lenticular screen (Col. 3, lines 42-44), which is part of the imaging medium (Col. 3, lines 61-62), and behind the imaging medium (Col. 4, lines 44-67), which includes a color-forming composition adapted to undergo color change upon an increase in temperature (Col. 3, lines 63-67). However, contrary to the Final Rejection's allegation at pages 5 and 10, Telfer et al. do not teach applying a 3-D image to any type of imaging composition.

Telfer et al. specifically teach forming a plurality of two-dimensional images of an object on imaging medium to form an orthoscopic three-dimensional image of an object which is visible to an observer through a lenticular screen (Col. 5, lines 20-36). The steps of the method of the Telfer et al. invention described in Figures 3 and 4 disclose that the image strips, which are formed with two-dimensional images (Col. 5, lines 24-36), are used to form the three-dimensional object as seen by the observer (Col. 22, lines 5-11). Figure 1 shows a laser source 22 generating infrared laser light ($h\nu_1$, $h\nu_2$ and $h\nu_3$) at a radiation sensitive layer 18; however, there is no disclosure that this infrared laser light is three-dimensional (Col. 14, lines 22-56). Accordingly, Telfer et al. do not teach or suggest all of the elements of claim 1. The Final Rejection is improperly combining Telfer et al. with Applicants' disclosure to arrive at the conclusion that it would have been obvious to project a 3-D image with a laser onto an imaging composition to affect a color or shade change in the imaging composition. See *In re Vaack*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

Kangas et al., Weed et al. and Applicants' own admission do not make up for the deficiencies of Telfer et al. None of them at least teach or suggest projecting a 3-D image with a laser onto an imaging composition.

Accordingly, for the reasons discussed above claims 11, 13 and 14 are patentable over the applied documents.

ISSUE 4: Whether claims 5-8, 10, 19 and 20 would have been obvious under 35 U.S.C. §103(a) over U.S. 6,547,397 to Kaufman et al. in view of U.S. 6,618,174 to Parker et al. in view of U.S. 5,681,676 to Telfer et al., in view of U.S. 5,112,721 to Kuchta and further in view of U.S. 2002/0064728 to Weed et al.

The applied document or combination of documents must teach or suggest all the limitations of the claims. See *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970) ("All words in a claim must be considered in judging the patentability of that claim against the prior art"). Kaufman et al. alone or, in combination with Parker et al. Telfer et al., Kuchta and Weed et al. do not teach or suggest a method comprising:

- a) providing an imaging composition comprising one or more cyclopentanone based conjugated photosensitizers and one or more reducing agents chosen from quinone compounds and acyl esters of triethanolamines, the imaging composition is applied to a film substrate with an adhesive applied to an opposite side of the film substrate;
- b) applying the imaging composition on the film substrate to a work piece;
- c) providing a 3-D imaging system for projecting a 3-D image with a laser onto the imaging composition;
- d) measuring a distance between a projector of the 3-D imaging system and at least one reference sensor on the work piece;
- e) applying algorithms to position the 3-D image onto the imaging composition; and
- f) applying the 3-D image onto the imaging composition at 5 mW or less to affect a color or shade change in the imaging composition to form an image on the imaging composition.

The Final Rejection at page 6 alleges that Kaufman et al. teach a 3-D imaging method comprising applying an imaging composition to a work piece, providing a 3-D imaging system,

positioning the work piece and applying energy to the imaging composition to affect a color change. This is incorrect. No where do Kaufman et al teach or suggest applying an imaging composition to a work piece followed applying a 3-D image to it to affect a color change. Kaufman et al. disclose applying a 3-D image to a contoured surface to determine the distance between the source of the 3-D image and the contoured surface (Col. 3, lines 29-33), but not to an imaging composition. Kaufman et al. are completely silent on any type of imaging composition and applying a 3-D image to such a composition to affect a color or shade change. Moreover, the Final Rejection has failed to provide any citation as to where Kaufman et al. teach or suggest such a method. The Final Rejection is improperly combining Kaufman et al. with Applicants' disclosure to arrive at such a conclusion. See *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

The Final Rejection's allegation that Figure 1 of Kaufman et al. is the same as Figure 1 of the present application is incorrect. Figure 1 of Kaufman et al. do not teach or suggest an imaging composition on object 30. The entire description of Figure 1 is silent on any type of imaging composition being applied to object 30 (Col. 5, lines 54-63). Kaufman et al. disclose a method for measuring the distance between a laser source and a contoured surface using a 3-D imaging device (Col. 3, lines 24-41). There is no teaching or suggestion anywhere in the disclosure to apply an imaging composition to the contoured surface. In contrast, Figure 1 of the present application discloses including an imaging composition 50 on the work piece 30 (specification, page 8, lines 11-16). The Final Rejection's allegation at page 6 that it would have been obvious to one of ordinary skill in the art to include an imaging composition on Figure 1 of Kaufman et al. and that Figure 1 "must have an imaging composition" is not based on any teaching or suggestion in Kaufman et al. but by combining Applicants' disclosure with Kaufman et al. This is improper. *Id.* The Final Rejection is obligated to use the teachings of the applied document to arrive at an obviousness rejection and not to look to Applicants' disclosure to arrive at the motivation to include an imaging composition on object 30. *Id.* The art must suggest the desirability of placing an imaging composition on the substrate of Kaufman et al. See *In re Gordan*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). There is no teaching or suggestion in Kaufman et al. which would have provided any reason or motivation for the person of ordinary skill in the art to apply an imaging composition to the contoured surface of Kaufman

et al. Kaufman et al. are directed to a method of determining the distance between a laser source and a contoured surface (Col. 3, lines 24-40), not a method of applying a 3-D image to an imaging composition to affect a color or shade change in the imaging composition.

Telfer et al. Kuchta and Weed et al. do not make up for the deficiencies of Kaufman et al. since none of these documents teaches or suggests projecting a 3-D image with a laser to an imaging composition to affect a color or shade change in the imaging composition. The specific reasons are discussed above.

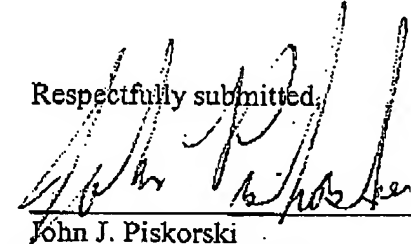
Further, although Parker et al. discloses applying a holographic image to a work piece to form apertures, the Final Rejection has not provided any reason or motivation based on the disclosure of Parker et al. to apply an imaging composition to the work piece of Kaufman et al.

Accordingly, for the reasons discussed above, claim 5-8, 10 and 19-20 are patentable over the applied documents.

SUMMARY

Therefore, for the foregoing reasons, it is respectfully submitted that the Board reverse the Final Rejection in this application.

Respectfully submitted,



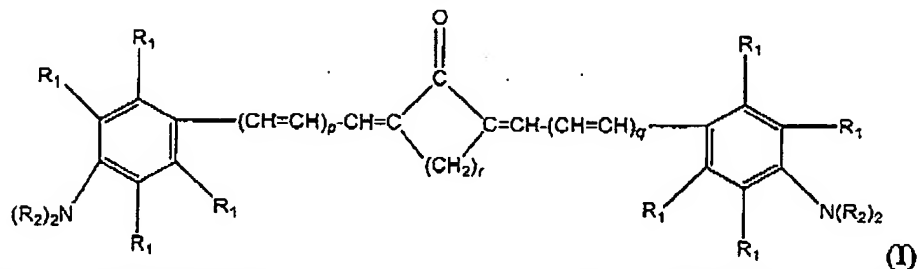
John J. Piskorski
Registration No. 35,647

Rohm and Haas Electronic Materials LLC
455 Forest Street
Marlborough, Massachusetts 01752
Telephone No.: (508) 229-7662
Facsimile No.: (508) 787-4730

VIII. CLAIMS APPENDIX

1. A method comprising:
 - a) applying an imaging composition comprising one or more cyclopentanone based conjugated photosensitizers and one or more reducing agents chosen from quinone compounds and acyl esters of triethanolamines to a work piece; and
 - b) projecting a 3-D image with a laser onto the imaging composition at 5 mW or less to affect a color or shade change in the imaging composition to form an image on the imaging composition.
2. The method of claim 1, wherein the 3-D image is selectively projected on the imaging composition.
4. The method of claim 1, wherein the imaging composition further comprises oxidizing agents, color formers, film forming polymers, plasticizers, flow agents, organic acids, chain transfer agents, adhesion promoters, adhesives, surfactants, rheology modifiers, thickeners, and diluents.
5. A method comprising:
 - a) providing an imaging composition comprising one or more cyclopentanone based conjugated photosensitizers and one or more reducing agents chosen from quinone compounds and acyl esters of triethanolamines, the imaging composition is applied to a film substrate with an adhesive applied to an opposite side of the film substrate;
 - b) applying the imaging composition on the film substrate to a work piece;
 - c) providing a 3-D imaging system for projecting a 3-D image with a laser onto the imaging composition;
 - d) measuring a distance between a projector of the 3-D imaging system and at least one reference sensor on the work piece;
 - e) applying algorithms to position the 3-D image onto the imaging composition; and
 - f) applying the 3-D image onto the imaging composition at 5 mW or less to affect a color or shade change in the imaging composition to form an image on the imaging composition.
6. The method of claim 5, wherein the algorithms are coordinate system transforms.
7. The method of claim 5, wherein the distance between the projector and the at least one reference sensor on the work piece is determined by a range-finding system.

8. The method of claim 11, wherein the one or more photosensitizers have a formula:



where p and q independently are 0 or 1, r is 2 or 3; R₁ is independently hydrogen, linear or branched (C₁-C₁₀)aliphatic, or linear or branched (C₁-C₁₀)alkoxy; and R₂ is independently hydrogen, linear or branched (C₁-C₁₀)aliphatic, (C₅-C₇) ring, alkaryl, phenyl, linear or branched (C₁-C₁₀)hydroxyalkyl, linear or branched hydroxy terminated ether, or the carbons of each R₂ may be taken together to form a 5 to 7 membered ring with the nitrogen, or a 5 to 7 membered ring with the nitrogen and with a second heteroatom chosen from oxygen, sulfur, or a second nitrogen.

10. The method of claim 5, wherein the amount of energy is at least 0.2mJ/cm².

11. A method comprising:

- a) providing an imaging composition comprising one or more photosensitizers, the imaging composition is applied to a film substrate with an adhesive applied to an opposite side of the film substrate;
- b) applying the imaging composition on the film substrate to a work piece; and
- c) projecting a 3-D image with a laser onto the imaging composition at 5 mW and at wavelengths of above 300 nm to less than 600 nm to affect a color or shade change in the imaging composition to form an image on the imaging composition.

12. The method of claim 11, wherein the adhesive is a releasable adhesive.

13. The method of claim 11, wherein the imaging composition further comprises one or more reducing agents.

14. The method of claim 13, wherein the one or more reducing agents are chosen from quinone compounds and acyl esters of triethanolamines.

16. The method of claim 11, wherein the wavelength is from 350 nm to 550 nm.

17. The method of claim 16, wherein the wavelength is from 400 nm to 535 nm.

18. The method of claim 11, wherein the film is polyolefin, vinyl copolymers, olefinic copolymers, acrylic polymers and copolymers, cellulose, polyesters and mixtures thereof, and blends of plastic or plastic and elastomeric materials.

19. The method of claim 5, further comprising a step of removing unwanted portions of the imaging composition from the work piece to form indicators on the work piece.

20. The method of claim 19, further comprising a step of drilling holes at the indicators for joining fasteners to the work piece.

IX. EVIDENCE APPENDIX

No evidence was submitted pursuant of §§ 1.130, 1.131 and 1.132.

X. RELATED PROCEEDINGS APPENDIX

There is no decision by the Board on the appeal for related application serial number 11/378,933.